CLOSURE PLAN, CONCRETE SURFACE IMPOUNDMENT,

NALCO CHEMICAL COMPANY

ODESSA PLANT, ODESSA, TEXAS

TXD095217766

RCVD 11/5/85 TWC

THIS CLOSURE PLAN IS BEING SUBMITTED IN PARTIAL FULFILLMENT OF THE TERMS OF A SETTLEMENT AGREEMENT ENTERED INTO BETWEEN REPRESENTATIVES OF EPA REGION VI AND NALCO IN DOCKET NUMBER RCRA VI-508-H AND DOES NOT CONSTITUTE AN ADMISSION BY NALCO THAT THE MATERIALS IT GENERATES AND STORES, WHICH ARE THE SUBJECT OF THIS CLOSURE PLAN, ARE SOLID WASTES OR ARE NOT BENEFICIALLY USED. NALCO'S POSITION IS MORE FULLY EXPLAINED IN THE OCTOBER 30, 1985 RESPONSE IT FILED IN DOCKET NO. RCRA VI-508-H, WHICH IS INCORPORATED BY REFERENCE.

I. FACILITY CONDITIONS

The Odessa plant of Nalco Chemical Company has a concrete pond, 70' X 80', in Gunnite construction. The pond is used for collection of wash water from the plant's truck loading - unloading area and from the tank farm. The wash water is stored temporarily in the pond prior to beneficial use as flush water in the oil fields pursuant to 40 CFR 261.1.

The pond has dimensions as shown on Drawing 4979-D. Freeboard is kept at approximately 2 feet, giving the pond an operating volume of approximately 102,000 gallons.

The maximum volume of water ever contained in the pond was approximately 157,000 gallons. This is equivalent to a freeboard of one foot rather than the normal 2 feet.

II. OTHER PERMITS

The facility has no NPDES permit for discharge of water from the pond.

The facility does have a state permit, Permit No. 02040, originally issued November 19, 1976. There is no discharge from the pond to waters of the state.

III. CLOSURE

Nalco has decided to close the pond and to install 2 steel tanks for collection of the wash water from the facility.

Auxiliary equipment needed for removing all residues from the pond and for decontamination will be brought in from the outside. The plant does have a steam cleaner available.

Schedule of final closure will be as follows:

1. No wash water has been directed to the pond since October 15, 1985.

2. All free standing liquids have been removed from the pond as of November 11, 1985.

3. All residues will be removed from the pond by December 20, 1985.

4. The concrete pond will be decontaminated by hydroblasting and steam cleaning by December 31, 1985.

5. Soil sampling will be completed by March 1, 1986.

Total time for closure will not exceed 6 months.

IV. REMOVING ALL INVENTORY

The pond has now been dewatered. A residue consisting of road dust and some oily materials remains. This will be removed for disposal at a permitted disposal site.

Analyses of the solids and liquids in the residue have been completed to show the material as non-hazardous:

Analyses of Solids

EPA Hazardous Waste Number	Contaminant	Detected, mg/L	EPA Max. Conc. Limits, mg/L
D004	Arsenic	Less than 0.1	5.0
D005	Barium	Less than 1	100.0
D006	Cadmium	Less than 0.1	1.0
D007	Chromium	Less than 0.2	5.0
D008	Lead	Less than 0.5	5.0
D009	Mercury	Less than 0.1	0.2
D010	Selemium	Less than 0.1	1.0
D011	Silver	Less than 0.1	5.0

A representative sample of the waste does not exhibit concentration levels greater than the maximum concentration limits listed, Federal Register, 1980, Vol. 45, No. 98, Para. 261.24.

Analysis of free liquid

pH 3.85
Flash point 150°F

At the time of removal the solids now in the pond will be treated to fix free liquid (chemical fixation) before being taken out for disposal at an authorized disposal site. It is estimated that final volume will amount to 150 - 200 cu yds of solids.

V. DECONTAMINATING THE WASHWATER COLLECTION POND

After the pond has been emptied and all solids removed, the pond will be cleaned by hydroblasting to remove any residual oily materials or other residues. Wash waters resulting from this cleaning operation will be taken to a local permitted deep well disposal facility for disposal.

The pond will finally be steam cleaned. This will result in some condensate which will also be taken to the permitted well disposal facility for disposal.

VI. SOIL SAMPLING

A rectangle, 28' X 14', will be cut out from the bottom of the pond in the north corner. Core samples will be taken from 5 locations inside of this rectangle. One sample will be in the center of the rectangle. The other 4 samples will be taken in the centers of 4 equally sized rectangles construed inside the original rectangle.

Samples will be collected down to 12 inches.

The samples will be analyzed for xylene and methanol. Analyses to be made on samples taken from top six inches of the borings.

If the analyses show no significant levels of xylene and methanol present, the but-out rectangle will be used as a base for installation of two 15,000 tanks in carbon steel construction. A 14' X 28" concrete pad, 12" thick, will be installed for support of the tanks. Joints with the existing Gunnites will be caulked to make these water tight.

In the event xylene and methanol are found in the core samples in significant concentrations requiring further remedial action, the entire concrete pond will be removed and contaminated soil will be taken to an permitted site for disposal. The pond will then be filled in to grade level.

Installation of the two tanks will be as shown on Nalco Drawing 1169-D.

VII. CLOSURE CERTIFICATION

An independent registered engineer will be retained to monitor progress of the closure and to certify completeness of closure operations.

Closure certification will be made by Nalco as well as by the independent engineer. Certification documents will be submitted to the Texas Water Commission upon completion of closure activities.

APPENDIX

I. Sampling Procedures

Sampling of soil and rock-like materials,
ASTM Standard D420-69.

Soil-like materials sampling,
ASTM Standard D1452-65.

Sampling of liquids, as described in
EPA - 600/2-80-018,
Samplers and Sampling Procedures for
Hazardous Waste Streams

II. Analytical Methods

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,
SW-846, Second Edition.

Methanol	8010, 8240, 8250
Xylene	8020, 8240

TANK FARM AND WASH WATER
COLLECTION POND